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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,553	08/30/2001	Michael L. Frank	10010472-1	3086

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AGILENT TECHNOLOGIES
Legal Department, 51U-PD
Intellectual Property Administration
P.O. Box 58043
Santa Clara, CA 96062-8043

EXAMINER

NGUYEN, KHAI M

ART UNIT	PAPER NUMBER
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2819

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/944,553	Applicant(s) FRANK, MICHAEL L.	
	Examiner Khai M. Nguyen	Art Unit 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The eight sheets of formal drawings filed on September 20, 2002 have been received.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Izumiyama (US 5,705,960).

Regarding claims 1-2, the Izumiyama reference discloses a single component comprising: the balun (7a & 7b), mixer (2), and filter (6), which are *integrated* into a multilayer substrate that includes a plurality of sheet layers (1a-1d) that is stacked to form the single component (as seen in Figs. 3 & 7 and column 5, lines 63-68).

Regarding claim 13, the Izumiyama reference discloses a single component comprising: the balun that includes a single ended port and a differential port (7a & 7b), mixer (2), and filter that includes a single ended port and a differential port (6), which are *integrated* into a multilayer substrate that includes a plurality of sheet layers (1a-1d) that is stacked to form the single component (as seen in Figs. 3 & 7).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-12 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Izumiyama (US 5,705,960).

Regarding claims 4-8, 12, and 17, the Izumiyama reference discloses that component of the claimed invention including the balun integrated with the filter (see the rejected claim 1) except for pointing out a particular kind of filter or balun as recited in the claims. It would have been obvious to one person having ordinary skill in the art at the time the invention was made to implement the structure of the filter as a surface acoustic wave filter or the like as suggested at column 2, lines 3-16 by the reference for the purpose of reducing unnecessary spurious signal.

Regarding claims 9-11, 16 & 20, the Izumiyama reference discloses that component of the claimed invention including the balun integrated with the filter (Fig. 7) except for pointing out the balun including inductors and capacitors and a particular kind of filter being used and as recited in the claims. It would have been obvious to one person having ordinary skill in the art at the time the invention was made would know that the balun is a transformer and normally comprises inductors and/or capacitors and to implement the filter of the component with different kind of filters such as band pass

filter or a surface acoustic wave filter or the like for the purpose of reducing unnecessary spurious signal as suggested at column 2, lines 3-16 by the reference.

Regarding claims 14-15, 18-19, and 21, the Izumiyama reference discloses that component of the claimed invention, including inputs, outputs, and the balun integrated with the filter (see Fig. 7), except for the arrangement of the balun and filter as claimed. The reference suggested that the filter, balun, and other subcomponents could be formed or placed on any sublayers if desired (column 2, lines 13-16; column 4, lines 52-56; and column 5, lines 66-67). It would have been obvious to one person having ordinary skill in the art at the time the invention was made to rearrange the subcomponents as suggested for reducing interference between the subcomponent (col. 6, lines 1-5).

Response to Arguments

6. Applicant's arguments filed September 13, 2002 have been fully considered but they are not persuasive. The applicant argues that the Izumiyama reference does not teaches or discloses a component, as claimed in the independent claims 1, 13, and 17, comprising: a filter that is integrated with a balun. As seen in Fig. 7 of the reference, by itself, it is a component. The circuit (of Fig. 7) comprises, among other things: a balun and a filter are integrated into a single component, which includes a plurality of sheet layers that is stacked to form the claimed component. The applicant also argues (on page 7 of the argument) that the above reference does not identify the addressed problem by the invention. However, It is the claims that define the claimed invention, and it is the claims, not specifications that are anticipated or unpatentable. *Constant v.*

Advanced Micro-Devices Inc., 7 USPQ 2s 1064. Therefore, the above rejection is maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclose.

Izumiyama (US 5,705,960), Mourant et al. (US 6,396,362), Imbornone et al. (US 6,137,376), and Einbinder (US 5,361,050) disclose relevant art to the claimed invention.


Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 703-605-4244. The examiner can normally be reached on 8:30 to 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Tokar can be reached on 703-305-3493. The fax phone numbers for the organization where this application or proceeding is assigned are 703- 308-7724 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-6789.

KN
November 14, 2002


Michael Tokar
Supervisory Patent Examiner
Technology Center 2800